

IN THE CLAIMS:

1. (Original) A catalyst for use in oxidation or reduction reactions, the catalyst comprising platinum, chromium at a concentration that is no greater than 30 atomic percent, and copper, nickel, or a combination thereof at a concentration that is at least 35 atomic percent.
2. (Original) A catalyst for use in oxidation or reduction reactions, the catalyst comprising platinum, chromium, and copper, nickel, or a combination thereof, wherein the concentration of copper, nickel, or a combination thereof is at least 45 atomic percent.
3. (Original) A catalyst for use in oxidation or reduction reactions, the catalyst comprising platinum, chromium, copper and nickel.
4. (Original) A catalyst for use in oxidation or reduction reactions, the catalyst comprising platinum, chromium, and copper, wherein the concentration of chromium is no greater than 30 atomic percent.
5. (Original) A catalyst for use in oxidation or reduction reactions, the catalyst comprising platinum, chromium, and nickel, wherein the concentration of nickel is at least 35 atomic percent.
6. (Original) A catalyst for use in oxidation or reduction reactions, the catalyst comprising platinum, chromium, and nickel, wherein the concentration of platinum is less than 40 atomic percent.
7. (Currently Amended) The catalyst of ~~one of claims 1-5~~ claim 1 wherein the platinum ~~is at a concentration that~~ is between about 5 and about 50 atomic percent.

8. (Currently Amended) The catalyst of claim 2, ~~3 or 6~~ wherein the chromium is ~~at a~~ concentration ~~that~~ is no greater than about 55 atomic percent.

9. (Currently Amended) The catalyst of ~~one of claims 1-6~~ claim 1 wherein the platinum is ~~at a~~ concentration ~~that~~ is between about 15 atomic percent and about 40 atomic percent, the chromium is ~~at a~~ concentration ~~that~~ is between about 5 and about 25 atomic percent, and the concentration of copper, nickel or a combination thereof is ~~between~~ about 45 and about 70 atomic percent.

10. (Currently Amended) The catalyst of ~~one of claims 1-6~~ claim 1 wherein the platinum is ~~at a~~ concentration ~~that~~ is between about 20 and about 35 atomic percent, the chromium is ~~at a~~ concentration ~~that~~ is between about 5 and about 25 atomic percent, and the concentration of copper, nickel or a combination thereof is ~~at a~~ ~~concentration that is~~ between about 50 and about 65 atomic percent.

11. (Currently Amended) The catalyst of ~~one of claims 1-6~~ claim 1 wherein the platinum is ~~at a~~ concentration ~~that~~ is between about 20 and about 30 atomic percent, the chromium is ~~at a~~ concentration ~~that~~ is between about 5 and about 25 atomic percent, and the concentration of copper, nickel or a combination thereof is ~~at a~~ ~~concentration that is~~ between about 50 and about 65 atomic percent.

12. (Original) A catalyst for use in oxidation or reduction reactions, the catalyst comprising platinum at a concentration that is between about 15 and about 50 atomic percent, chromium at a concentration that is between about 5 and about 45 atomic percent, and copper at a concentration that is between about 15 and about 50 atomic percent.

13. (Original) The catalyst of claim 12 wherein the platinum concentration is between about 35 and about 50 atomic percent.

14. (Currently Amended) The catalyst of claim 12-~~or 13~~ wherein the chromium concentration is between about 5 and about 35 atomic percent.

15. (Currently Amended) The catalyst of claim 12,~~13 or 14~~ wherein the copper concentration is between about 20 and about 45 atomic percent.

16. (Currently Amended) The catalyst of ~~one of claims 1-15~~ claim 1 wherein the catalyst consists essentially of platinum, chromium, and copper, nickel, or a combination thereof.

17. (Currently Amended) The catalyst of ~~one of claims 1-15~~ claim 1 wherein the catalyst comprises an alloy of platinum, chromium, and copper ~~and/or nickel, nickel, or a combination thereof.~~

18. (Currently Amended) The catalyst of ~~one of claims 1-15~~ claim 1 wherein the catalyst consists essentially of an alloy of platinum, chromium, and copper ~~and/or nickel, nickel, or a combination thereof.~~

19. (Currently Amended) A supported electrocatalyst powder for use in electrochemical reactor devices, the supported electrocatalyst powder comprising the catalyst ~~as in any one of claims 1-18~~ of claim 1 and electrically conductive support particles upon which the catalyst is dispersed.

Claims 20-38. (Canceled)

39. (New) The catalyst of claim 2 wherein the platinum concentration is between about 5 and about 50 atomic percent.

40. (New) The catalyst of claim 2 wherein the catalyst consists essentially of platinum, chromium, and copper, nickel, or a combination thereof.

41. (New) The catalyst of claim 2 wherein the catalyst comprises an alloy of platinum, chromium, and copper, nickel, or a combination thereof.
42. (New) The catalyst of claim 2 wherein the catalyst consists essentially of an alloy of platinum, chromium, and copper, nickel, or a combination thereof.
43. (New) A supported electrocatalyst powder for use in electrochemical reactor devices, the supported electrocatalyst powder comprising the catalyst of claim 2 and electrically conductive support particles upon which the catalyst is dispersed.
44. (New) The catalyst of claim 3 wherein the platinum concentration is between about 5 and about 50 atomic percent.
45. (New) The catalyst of claim 3 wherein the chromium concentration is no greater than about 55 atomic percent.
46. (New) The catalyst of claim 3 wherein the catalyst consists essentially of platinum, chromium, copper and nickel.
47. (New) The catalyst of claim 3 wherein the catalyst comprises an alloy of platinum, chromium, copper and nickel.
48. (New) The catalyst of claim 3 wherein the catalyst consists essentially of an alloy of platinum, chromium, copper and nickel.
49. (New) A supported electrocatalyst powder for use in electrochemical reactor devices, the supported electrocatalyst powder comprising the catalyst of claim 3 and electrically conductive support particles upon which the catalyst is dispersed.

50. (New) The catalyst of claim 4 wherein the platinum concentration is between about 5 and about 50 atomic percent.

51. (New) The catalyst of claim 4 wherein the catalyst consists essentially of platinum, chromium and copper.

52. (New) The catalyst of claim 4 wherein the catalyst comprises an alloy of platinum, chromium and copper.

53. (New) The catalyst of claim 4 wherein the catalyst consists essentially of an alloy of platinum, chromium and copper.

54. (New) A supported electrocatalyst powder for use in electrochemical reactor devices, the supported electrocatalyst powder comprising the catalyst of claim 4 and electrically conductive support particles upon which the catalyst is dispersed.

55. (New) The catalyst of claim 5 wherein the platinum concentration is between about 5 and about 50 atomic percent.

56. (New) The catalyst of claim 5 wherein the catalyst consists essentially of platinum, chromium and nickel.

57. (New) The catalyst of claim 5 wherein the catalyst comprises an alloy of platinum, chromium and nickel.

58. (New) The catalyst of claim 5 wherein the catalyst consists essentially of an alloy of platinum, chromium and nickel.

59. (New) A supported electrocatalyst powder for use in electrochemical reactor devices, the supported electrocatalyst powder comprising the catalyst of claim 5 and electrically conductive support particles upon which the catalyst is dispersed.

60. (New) The catalyst of claim 6 wherein the chromium concentration is no greater than about 55 atomic percent.

61. (New) The catalyst of claim 6 wherein the catalyst consists essentially of platinum, chromium and nickel.

62. (New) The catalyst of claim 6 wherein the catalyst comprises an alloy of platinum, chromium and nickel.

63. (New) The catalyst of claim 6 wherein the catalyst consists essentially of an alloy of platinum, chromium and nickel.

64. (New) A supported electrocatalyst powder for use in electrochemical reactor devices, the supported electrocatalyst powder comprising the catalyst of claim 6 and electrically conductive support particles upon which the catalyst is dispersed.